

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : Arntzen, et al.  
SERIAL NO : 09/593,908  
FILED : June 14, 2000  
TITLE : VACCINES EXPRESSED IN PLANTS

Grp./A.U. : 1633  
Examiner : Drabik, C  
Conf. No. : 6722  
Docket No. : P00245USB

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This preliminary amendment is being concurrently filed with the continuation application of the above-identified case:

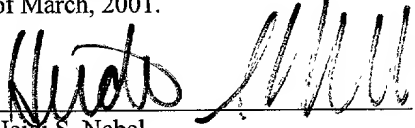
**In the Specification**

Please replace the paragraph beginning at page 1, line 4 with the following:

--This is a continuation of U.S. Serial No. 09/593,908 filed June 14, 2000; which is a continuation of U.S. Serial No. 09/111,330 filed July 7, 1998, which issued as U.S. Patent No. 5,484,719 October 24, 2000; which is a continuation of U.S. Serial No. 08/479,742 filed June 6, 1995, which issued as U.S. Patent No. 5,914,123 June 22, 1999; which is a divisional of U.S. Serial No. 08/026,393 filed March 4, 1993, which issued as U.S. Patent No. 5,612,487 March 18, 1997; and a continuation-in-part of copending PCT application Serial No. PCT/US94/02332 filed

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this document and the documents referred to as enclosed therein are being deposited with the United States Postal Service as First Class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on this 23 day of March, 2001.

  
Heidi S. Nebel

March 4, 1994 (designating the US) which is a continuation-in-part of copending application Serial No. 08/026,393 filed March 4, 1993, which issued as U.S. Patent No. 5,612,487; which itself is a continuation-in-part of Serial No. 07/750,049 filed August 26, 1991 (now abandoned). This application is also a continuation-in-part of application Serial No. 08/156,508 filed November 23, 1993, which issued as U.S. Patent No. 5,484,719 January 16, 1996. Applicants incorporate herein by reference the specification of each of the above-mentioned applications.--

### **In the Claims**

Claims 2-72 have been canceled.

Claims 73-77 have been added:

#### **73. (New)**

A method of producing an immunogenic composition comprising expressing a recombinant viral immunogen in a plant, wherein said immunogen is expressed in the plant at a level such that upon oral administration of said composition to an animal, an immunogenic response is observed.

#### **74. (New)**

The method of claim 73 wherein said immunogen is capable of generating an immunogenic response when the immunogen interacts with a mucosal membrane.

#### **75. (New)**

The method of claim 73 wherein said immunogen is a chimeric protein.

#### **76. (New)**

The method of claim 73 wherein said immunogen is an immunogen derived from a hepatitis virus.

#### **77. (New)**

The method of claim 73 wherein said immunogen is an immunogen derived from a transmissible gastroenteritis virus

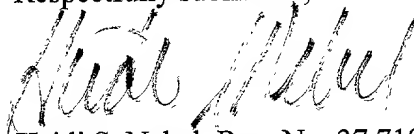
## REMARKS

Applicants respectfully request that the foregoing preliminary amendment be made of record in the above identified case.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



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-pw-

Application No. 09/593,908

**AMENDMENT — VERSION WITH MARKINGS  
TO SHOW CHANGES MADE — DO NOT FILE**

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